

## CLAIMS:

1. Device for supplying electricity to a motor vehicle, having a chargeable battery, a capacitor and a circuit arrangement arranged between the battery and the capacitor, characterized in that the circuit arrangement is a voltage transformer (2), in that the nominal voltage ( $U_{c \max}$ ) of the capacitor (1) is higher than the nominal voltage ( $U_B$ ) of the battery (3), in that the battery (3) can be charged by means of the capacitor (1), and in that the charging of the battery (3) is controlled by means of the capacitor (1) by way of the voltage transformer (2).

2. Device according to Claim 1, characterized in that the charging of the battery (3) is controlled by means of the capacitor (1) by way of the voltage transformer (2) such that the capacitor (1) is maximally discharged until a value of the capacitor voltage ( $U_c$ ) is reached which is equal to the value of the actual voltage ( $U_{B \text{ actual}}$ ) of the battery (3).

AB1  
AA1

ist	=	actual
Aufladung	=	charging
Entladung	=	discharging

Aufladung = charging

Entladung = discharging